## WATER COOLING AND COOLING TOWERS 251

rapidly the vapour contents and the corresponding amount of heat increase with the temperature.

ao <sup>200</sup> 40 120 140

## TEMPERATURE?FAH

Fig. 29.—Heat and Vapour Contents in i Ib.Air at Atmospheric Pressure  $\,$ 

Suppose the saturated air entering a cooling tower at  $60^{\circ}$  F. leaves the tower saturated at  $90^{\circ}$  F., then the amount of vapour absorbed is

0-031 - O'Oii = 0-02 Ib. per pound air,

and the absorption of heat is

48 - 18 = 30 B.Th.U. per pound air.

Under normal conditions of operation, however, the air entering and